

**Listing of Claims:**

1           **Claim 1 (currently amended):**   An information providing  
2 apparatus for acquiring contents data representing a high  
3 quality still image from a service providing apparatus capable  
4 of storing the contents data and of transmitting the contents  
5 data in response to a request from a remote user terminal, and  
6 for providing the contents data to the remote user terminal,  
7 said information providing comprising:

8           reproducing means for reproducing the contents data;

9           picture data relaying means for relaying still picture  
10           data obtained from the contents data reproduced by  
11           the reproducing means;

12          moving picture coding means for producing compressed  
13          moving picture data using a moving picture coding  
14          format and having a high image quality from the  
15          still picture data coded using a still picture  
16          coding format and obtained from said picture data  
17          relaying means, said producing being performed by  
18          way of a stepwise image quality complementary type  
19          coding system for complementing an image quality in  
20          a stepwise manner, and for transmitting the  
21          compressed moving picture data to the user terminal  
22          to display a still display picture using said moving  
23          picture coding format; and

24 control means for determining an area of the still  
25 picture data coded into the compressed moving  
26 picture data in response to a user selection of a  
27 portion of the still display picture made from the  
28 remote user terminal, and for notifying the selected  
29 area to the moving picture coding means.

1 **Claim 2 (previously presented):** An information providing  
2 apparatus as claimed in claim 1, wherein  
3 said control means is capable of producing a control  
4 signal used to change the reproducing state of the  
5 reproducing means by receiving a manipulation of the  
6 user terminal, and is capable of transmitting the  
7 control signal to the reproducing means; and wherein  
8 the moving picture coding means produces compressed  
9 moving picture data from said still picture data,  
10 the content of which is sequentially changed by  
11 changing a setting condition of a coding process  
12 operation.

1 **Claim 3 (previously presented):** An information providing  
2 apparatus as claimed in claim 1, wherein the moving picture  
3 coding means also produces audio data having a designated data  
4 format from audio data contained in the contents data, and  
5 also produces multiplexed AV data by multiplexing the

6 compressed moving data with the audio data, and transmits the  
7 multiplexed AV data to the user terminal.

1       **Claim 4 (currently amended):** An information providing  
2 apparatus for providing data to a remotely located user  
3 terminal in response to a request, comprising:

4       storing means for storing contents data including still  
5       picture data;

6       reproducing means for reproducing the contents data;

7       picture data relaying means for relaying the still  
8       picture data originated from the contents data  
9       reproduced by the reproducing means;

10       moving picture coding means for producing compressed  
11       moving picture data coded using a moving picture  
12       coding format and having a high image quality from  
13       the still picture image data coded using a still  
14       picture coding format and by way of a stepwise image  
15       quality complementary type coding system for  
16       complementing an image quality in a stepwise manner,  
17       and for transmitting the compressed moving picture  
18       data to the remotely located user terminal for  
19       displaying a still display image using said moving  
20       picture coding format; and

21       control means for determining an area of still picture  
22       data coded into the compressed moving picture data

23           in response to a user selection of a portion of the  
24           still display image made from the remote user  
25           terminal, and for notifying the selected area to the  
26           moving picture coding means.

1           **Claim 5 (previously presented):** An information providing  
2   apparatus as claimed in claim 4, wherein  
3           said control means is also for producing a control signal  
4           used to change the reproducing state of the  
5           reproducing means by receiving a manipulation of the  
6           user terminal, and is further for transmitting the  
7           control signal to the reproducing means; and wherein  
8           the moving picture coding means produces compressed  
9           moving picture data from the still picture data, the  
10          content of which is sequentially changed by changing  
11          a setting condition of coding process operation.

1           **Claim 6 (previously presented):** n information providing  
2   apparatus as claimed in claim 4, wherein the moving picture  
3   coding means also produces audio data having a designated data  
4   format from audio data contained in the contents data, and  
5   also produces multiplexed AV data by multiplexing the  
6   compressed moving picture data with the audio data, and also  
7   transmits the multiplexed AV data to the user terminal.

1       **Claim 7 (currently amended):**   An information providing  
2 system for acquiring content data from a service providing  
3 system and for providing a communication service to a remotely  
4 located mobile terminal, wherein the content data represents a  
5 high quality still image coded using a still picture coding  
6 format, said information providing system comprising:

7       moving picture coding means for producing compressed

8       moving picture data coded using a moving picture

9       coding format from the content data using a stepwise

10       image quality complementary coding system; and

11       transmitting means for transmitting the compressed moving

12       picture data to the mobile terminal, wherein

13       the mobile terminal displays a still display image

14       representing the high quality still image from the

15       compressed moving picture data using said moving

16       picture coding format, such that image processing of

17       the content data is primarily conducted by the

18       information providing system to thereby reduce a

19       processing load and/or a memory requirement on the

20       mobile terminal.

1       **Claim 8 (previously presented):**   The system of claim 7,  
2 wherein the mobile terminal displays the display image in  
3 progressively more detail over some period of time.

1       **Claim 9 (previously presented):** The system of claim 7,  
2 wherein the mobile terminal is a mobile terminal capable of  
3 displaying compressed moving picture images.

1       **Claim 10 (previously presented):** The system of claim 9,  
2 wherein the mobile terminal is a PDA or a portable telephone.

1       **Claim 11 (previously presented):** The system of claim 7,  
2 wherein the mobile terminal is a PDA or a portable telephone.

1       **Claim 12 (previously presented):** The system of claim 7,  
2 further comprising control means for determining an area of a  
3 portion of the display image, wherein the portion is chosen by  
4 a user manipulation at the mobile terminal, and wherein the  
5 control means provides the determined area to the moving  
6 picture coding means.

1       **Claim 13 (currently amended):** An information providing  
2 system for acquiring content data from a service providing  
3 system and for providing a communication service to a remotely  
4 located mobile terminal capable of displaying compressed  
5 moving picture data and connected to a communication network,  
6 wherein the content data represents a high quality still image  
7 coded using a still picture coding format, said information  
8 providing system comprising:

9 moving picture coding means for producing compressed  
10 moving picture data coded using a moving picture  
11 coding format from the content data using a stepwise  
12 image quality complementary coding system; and  
13 transmitting means for transmitting the compressed moving  
14 picture data to the mobile terminal via the  
15 communication network such that image processing is  
16 conducted at the information providing system to  
17 thereby reduce a processing load and/or a memory  
18 requirement on the mobile terminal, and wherein  
19 the mobile terminal displays a still display image  
20 representing the high quality still image from the  
21 compressed moving picture data using said moving  
22 picture coding format.

1 **Claim 14 (previously presented):** The system of claim 13,  
2 wherein the mobile terminal is a PDA or a portable telephone.

1 **Claim 15 (previously presented):** The system of claim 13,  
2 wherein the mobile terminal displays the still display image  
3 in progressively more detail over some period of time.

1 **Claim 16 (previously presented):** The system of claim 13,  
2 further including control means for determining an area of a  
3 portion of the display image, wherein the portion is chosen by

4 a user manipulation at the mobile terminal, and wherein the  
5 control means provides the determined area to the moving  
6 picture coding means, which then produces new compressed  
7 moving picture data from the content data using the stepwise  
8 image quality complementary coding system, wherein the new  
9 compressed moving picture data corresponds to the chosen  
10 portion of the display image for displaying the chosen portion  
11 on the mobile device in a larger fashion.

1 **Claim 17 (currently amended):** A system comprising:  
2 a mobile terminal including telephone capability for  
3 connecting to a telephone network and capable of  
4 displaying compressed moving picture data;  
5 a service providing system for providing content data  
6 representing a high quality still image coded using  
7 a still picture coding format as a service; and  
8 an information providing system for acquiring the content  
9 data from the service providing system and for  
10 providing a communication service to the mobile  
11 terminal, said information providing system  
12 including:  
13 moving picture coding means for producing compressed  
14 moving picture data coded using a moving  
15 picture coding format from the content data for  
16 providing compressed moving picture data to the



mobile terminal for display on the mobile terminal,  
transmitting means for transmitting the compressed moving picture data to the mobile terminal, wherein the mobile terminal displays a still display image representing the high quality still image from the compressed moving picture data using said moving picture coding format,  
control means for determining an area of the still picture data coded into the compressed moving picture data in response to a user selection of a portion of the still display image from the user terminal, and for notifying the selected area to the moving picture coding means,  
wherein  
the moving picture coding means then produces new compressed moving picture data from the content data corresponding to the user selected portion of the display image for displaying the selected portion on the mobile terminal in a larger fashion as a zoomed still image; wherein the information providing system operates such that a primary portion of image processing of the content data is conducted at the information providing system to thereby reduce a processing

42                           load and/or a memory requirement on the mobile  
43                           terminal.